

**Figure 1: Biacore analysis to measure ClfA binding and subsequent binding/inhibition of fibrinogen when Mabs 13-1 or 13-2 are bound to the chip using rabbit anti-mouse Fc (RAM-Fc) antibody.**

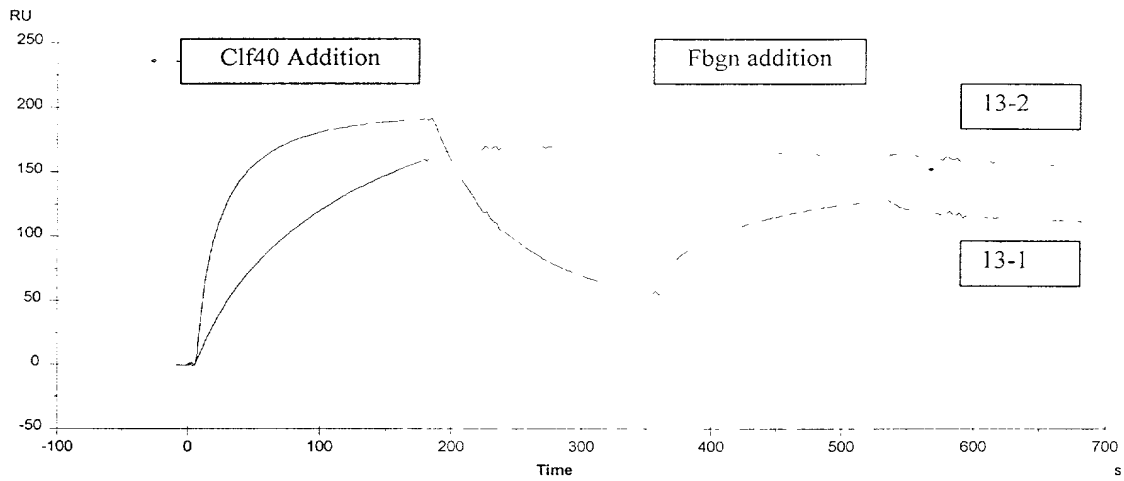
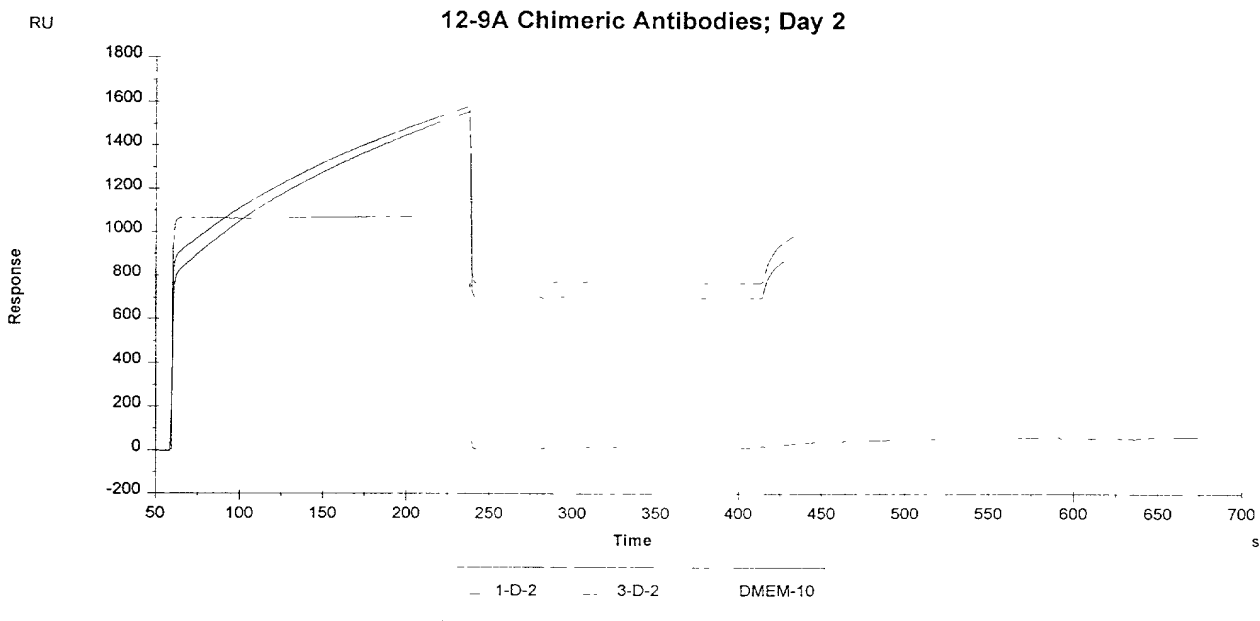


Figure 2. Biacore Analysis of Chimeric 12-9.



**Figure 3. Flow Cytometric Analysis of Chimeric 12-9 Binding to *Staph aureus* Strain Newman**

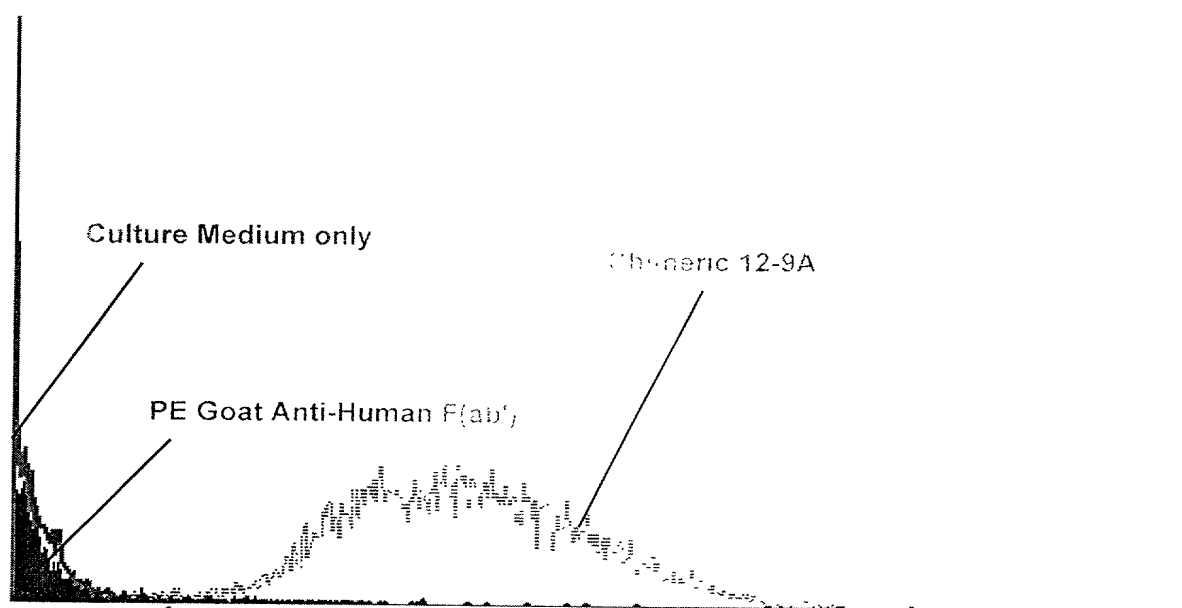


Figure 4: Binding Affinity of Chimeric and Humanized 12-9 to ClfA

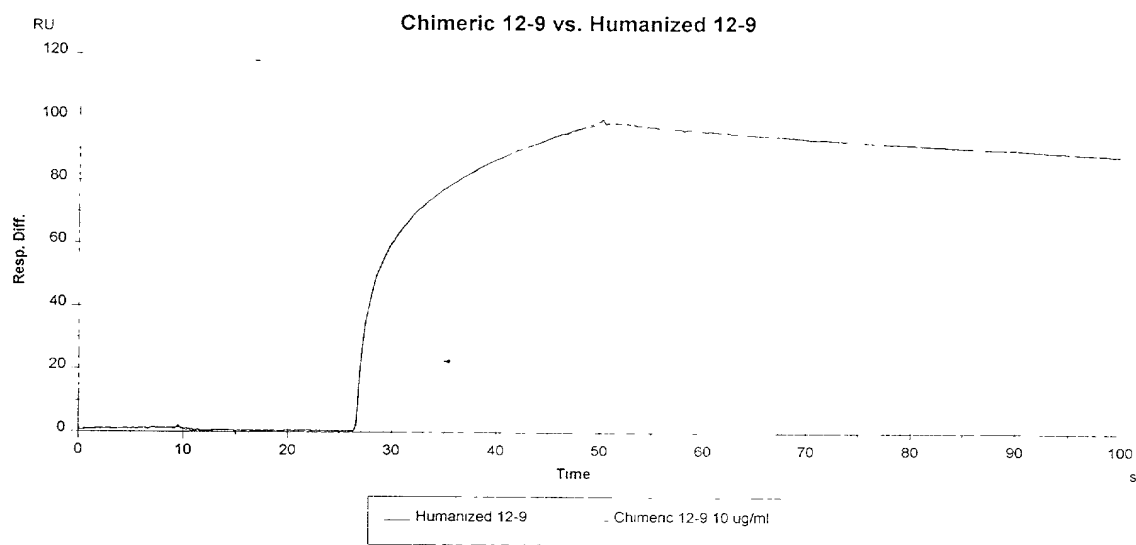


Figure 5. Protection in the Murine *S. aureus* Lethal Challenge Model

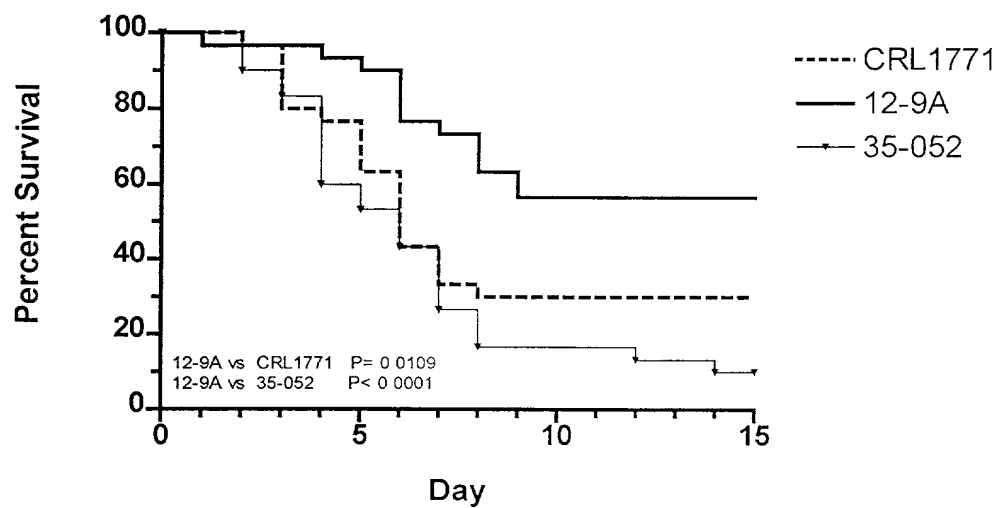


Figure 6. Whole Cell Inhibition of *S. aureus* Adherence to Immobilized Fibrinogen

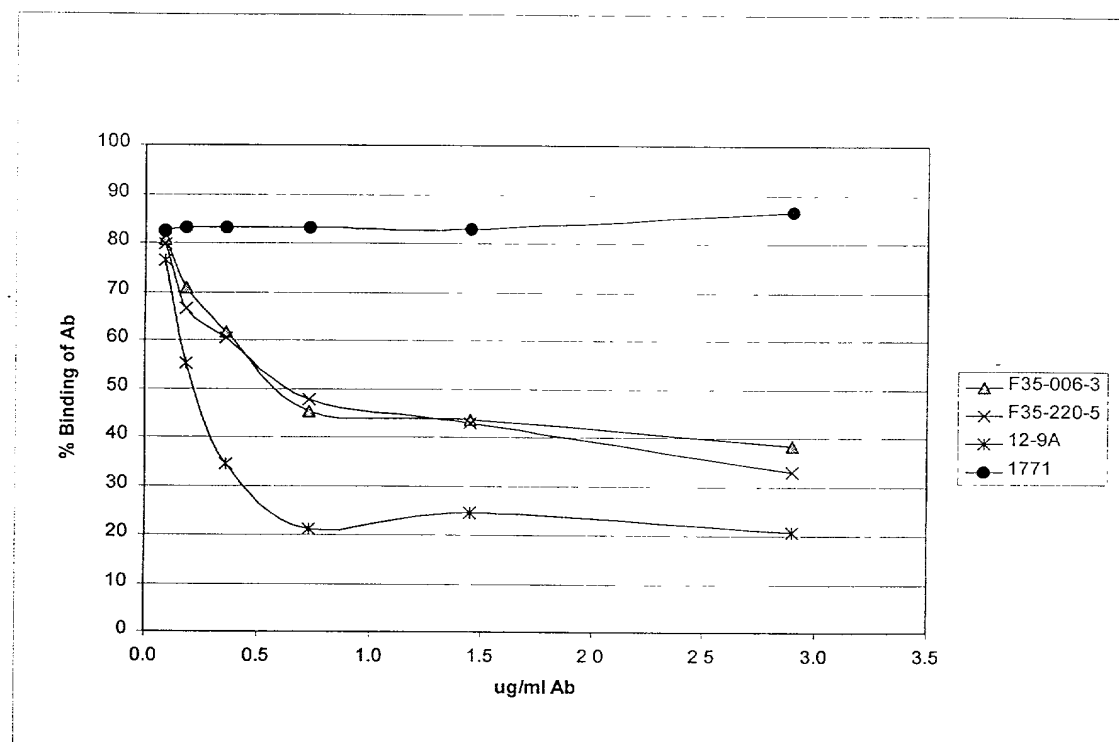
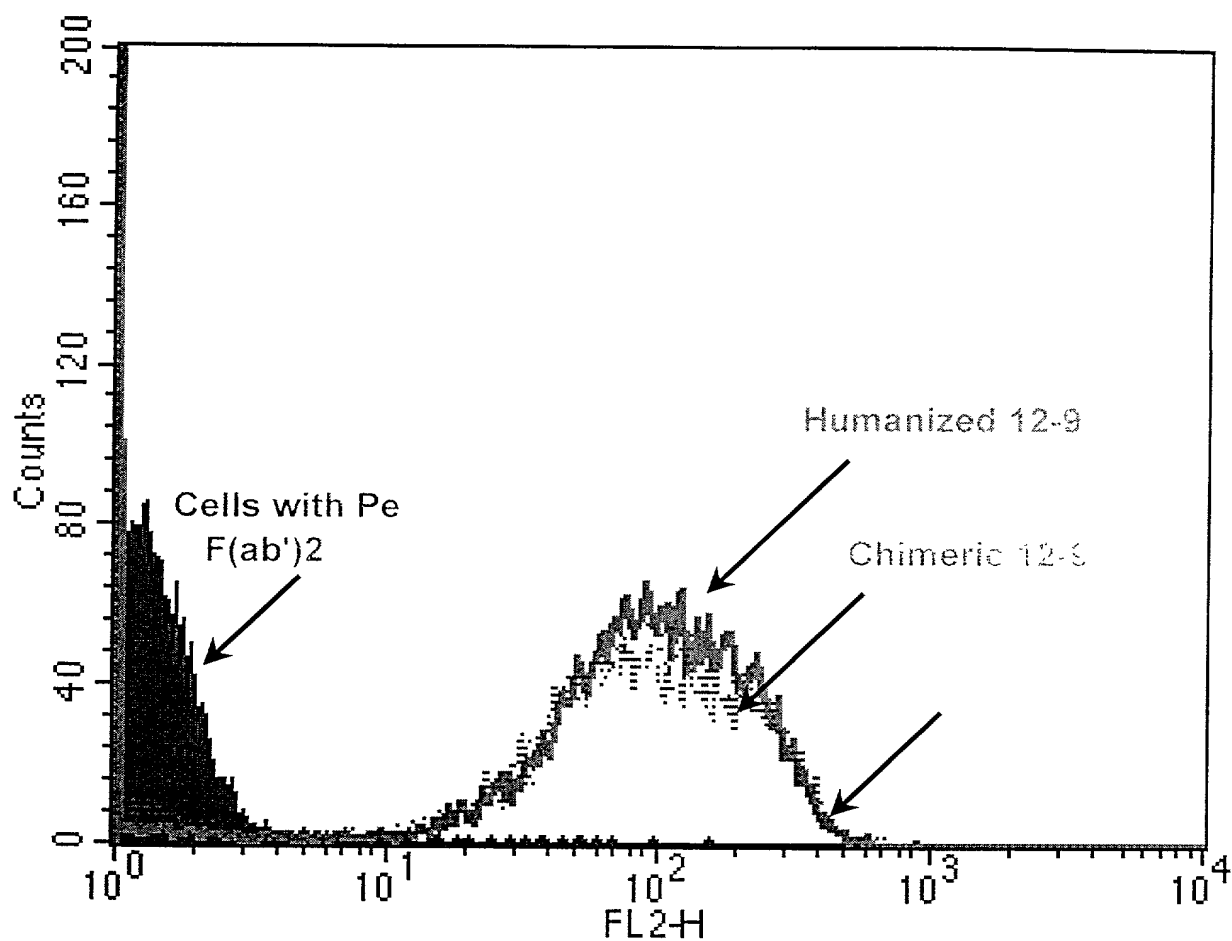


Figure 7. Comparative *S. aureus* Binding; 12-9 Murine, 12-9 Chimeric and 12-9 Humanized



This example demonstrates that humanized 12-9 can be humanized, cloned and expressed a single expression cassette capable of yields to support commercial scale quality and purity.

## Variable Light Chain

Antibody	CDR 1	CDR 2	CDR 3
1771	L S S Q S L L D S D G K T F L N	L V S K L D S	W Q G T H F P Y T
12-9 (ClfA)	K S S Q S V L Y S S N Q K N Y L A	W A S T R E S	H Q Y L S S Y T
13-2	K S S Q S V L Y S S N Q K N Y L A	W A S T R E S	H Q Y L S S H T
35-006	K S S Q S V L Y S S N Q K N Y L A	W A S T R E S	H Q Y L S S Y T
35-220	R S S Q S V L Y S S N Q K N Y L A	W A S T R E S	H Q Y L S S Y T
Consensus	K S S Q S V L Y S S N Q K N Y L A	W A S T R E S	H Q Y L S S Y T <sub>H</sub>

## Variable Heavy Chain

Antibody	CDR1	CDR2	CDR3
1771	S G F S W H	Y I H Y S G S T D C N P S L K S	M P D S
12-9 (ClfA)	R Y S V H	M I W G G G N T D Y N S A L K S	K G E F Y Y G Y D G F V Y
13-2	R Y N I H	M I W G G G N T D Y N S A L K S	A Y Y G N S W F A Y
35-006	R Y S V H	M I W G G G S T D Y N S A L K S	R L W Y F D V
35-220	R Y S V H	M I W G G G N T D Y N S A L K S	A Y Y G N S W F A Y
Consensus	R Y S V H <sub>N I</sub>	M I W G G G N T D Y N S A L K S <sub>E S</sub>	A Y Y G N S W F A * * * Y <sub>H</sub> K G E F Y Y G Y D R L W Y F D V

FIGURE 8 - CONSERVED SEQUENCES  
IN VARIABLE LIGHT AND HEAVY CHAINS